

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C.**

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In the Matter of	)	
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A National Broadband Plan for Our Future	)	GN Docket No. 09-51
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**REPLY COMMENTS OF TECHAMERICA**

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## **EXECUTIVE SUMMARY**

To maximize the effectiveness of the national broadband plan, the Commission should define broadband in a dynamic manner that will allow for change over time, while embracing all broadband delivery technologies. The Commission should also aim to drive broadband deployment through the use of anchor institutions like schools, hospitals, and libraries to reach its goal of enabling every American to have access to high-speed broadband.

Efforts to reach the goal of 100 percent access are best served by a deployment program focused on high capacity broadband and an adoption program focused on stimulating demand. Targeted tax incentives, aligning deployment efforts with transportation projects, using anchor institutions for middle mile deployment and ensuring that current commercial spectrum is fully utilized are all mechanisms that the Commission should consider to enhance deployment efforts. Furthermore, TechAmerica suggests that programs focused on increasing computer ownership – particularly in homes with K-12 students – and improving digital literacy would powerfully stimulate broadband demand and adoption. A comprehensive broadband mapping tool will be essential to monitoring broadband deployment and adoption as time passes.

The Commission should note that this NOI is not the proper forum to elaborate on cybersecurity, health IT, or intellectual property policy. Rather, the Commission should defer to Congress or the agencies of expertise to drive policy on these issues.

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## **DISCUSSION**

TechAmerica hereby submits comments to the Federal Communications Commission (FCC).<sup>1</sup> TechAmerica's members have a vested interest in expanding the deployment and adoption of broadband, and as a result are responding to the Notice for the national broadband plan.

TechAmerica is the leading voice for the U.S. technology industry, which is the driving force behind productivity growth and jobs creation in the United States and the foundation of the global innovation economy. Representing approximately 1,500 member companies of all sizes from the public and commercial sectors of the economy, it is the industry's largest advocacy organization and is dedicated to helping members' top and bottom lines. It is also the technology industry's only grassroots-to-global advocacy network, with offices in state capitals around the United States, Washington, D.C., Europe (Brussels) and Asia (Beijing). TechAmerica was formed by the merger of AeA (formerly the American Electronics Association), the Cyber Security Industry Alliance (CSIA), the Information Technology Association of America (ITAA) and the Government Electronics and Information Association (GEIA).

TechAmerica's membership has long advocated for expanding the deployment and adoption of broadband. TechAmerica members include: manufacturers and suppliers of broadband networks and equipment; consumer electronics companies; ICT hardware companies; software and application providers; systems integrators; Internet and e-

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<sup>1</sup> Notice of Inquiry, *A National Broadband Plan for Our Future*, GN Docket No. 09-51, FCC No. 09-31 (rel. April 8, 2009) (hereinafter "*NOI*").

commerce companies; Internet service providers; information technology government contractors; and information technology consulting and sourcing companies.

All of these diverse interests want to see a successful implementation of the national broadband plan.

## **I. ESTABLISHING GOALS AND BENCHMARKS**

### **A. How to define broadband.**

TechAmerica's members have submitted numerous definitions of broadband.<sup>2</sup> However, there are certain important criteria that should guide the Commission's definitional effort. First, any definition of broadband must be sufficiently robust and tied to the ability of consumers to have access to cutting edge applications, content, and services on the Internet. In doing so, consumers will see the many benefits of broadband deployment and adoption that have been touted for so many years. Additionally, innovators will be allowed to innovate and continue to create a new and better Internet.

Second, it is important that the definition of broadband be dynamic because today's cutting edge network will be tomorrow's outdated network. By failing to recognize dynamism as a critical component of broadband, the Commission may potentially prevent networks from expanding their capabilities and inhibit innovation. To ensure that broadband is defined as sufficiently dynamic, the Commission should avoid tethering the definition of broadband to specific speeds. Instead, the definition should

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<sup>2</sup> See, e.g., Comments of Google Inc. GN Docket No. 09-51, at 8-9 (filed June 8, 2009); Comments of AT&T Inc. GN Docket No. 09-51, at 12-15 (filed June 8, 2009); Comments of Intel Corp., GN Docket No. 09-51, at 12 (filed June 8, 2009); Comments of Microsoft Corp., GN Docket No. 09-51, at 1-4 (filed June 8, 2009); Comments of Verizon & Verizon Wireless, GN Docket No. 09-51, at 26-28 (filed June 8, 2009).

focus on ensuring the network can meet consumer demand today and future consumer demand to promote innovation and enable a smooth transition to changes in Internet usage.

Furthermore, defining broadband as dynamic and refraining from tethering the definition to a particular speed is necessary because measuring upload and download speeds of a network is an inexact science. Network speeds will be variable based on the usage patterns over the last-mile, middle-mile and long-haul of a particular network, whether that network is fixed or mobile. Due to the number of unwieldy factors affecting speed, the Commission should avoid setting its definition of broadband on an arbitrary speed that may not accurately represent the connection at a given moment. The definition should instead focus on what the end-user truly cares about – the ability of the network meet their demands today and in the future.

Third, it is important that the definition take into account the different technologies that can be used to deliver broadband. A broadband experience on a mobile device like the iPhone or Blackberry is completely different than the broadband experience for a personal computer user via a fixed-network. Thus, any definition that the Commission chooses to implement should take into account the different devices and ways that Americans choose to use broadband.

Fourth, the definition of broadband should be based on what the user received on the edge of the network – the last mile connection. While middle mile and anchor institutions are going to play an important role in getting broadband into every unserved and underserved community and are a part of the solution, the definition of broadband

needs to be tethered to the end-user experience. This will provide a more accurate picture than the capabilities of an anchor institution in the community before build-out occurs off of that anchor institution's capabilities.

**B. In order to drive greater broadband deployment, policymakers should use anchor institutions such as schools, libraries and hospitals.**

Anchor institutions can play an important role in driving greater broadband deployment.<sup>3</sup> Build out of fixed, very high capacity middle mile connections to institutions such as hospitals, schools, post offices, community centers and libraries will allow local wireless and fixed providers to build off of these networks to reach homes and businesses in a community. Specifically, TechAmerica would like to refer to the Comments submitted by member companies Microsoft and Google as ways of using anchor institutions to deploy broadband in a cost effective manner to hard-to-reach communities.<sup>4</sup>

**C. The goal of the national broadband plan should be to ensure that every American has access to a high capacity broadband connection.**

The Commission's primary goal should be to ensure that every American has access to a high capacity broadband connection, regardless of the specific delivery technology.<sup>5</sup> Staying focused on that goal will help the Commission best achieve its mission as directed by Congress in American Recovery and Reinvestment Act of 2009 (ARRA).

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<sup>3</sup> See *NOI*, para. 21 (seeking comment about the role of anchor institutions for broadband deployment).

<sup>4</sup> See Comments of Microsoft Corp. GN Docket No. 09-51, at 5-6; Comments of Google Inc., GN Docket No. 09-51, at 37-39.

<sup>5</sup> See *NOI*, para. 23 (asking for comment on the goals of the national broadband plan).



## **II. EFFECTIVE AND EFFICIENT MECHANISMS FOR ENSURING ACCESS**

### **A. Targeted tax credits and incentives can be an effective mechanism for broadband deployment.**

Targeted tax credits and incentives can play an important role in broadband deployment by lowering the high costs of deployment.<sup>6</sup> Other countries have used tax incentives to great success, including South Korea and Japan.<sup>7</sup> Congress has previously made proposals resembling foreign tax policies that the Commission should adopt as part of its broadband plan. For example, during the debate over the ARRA, Senator Rockefeller (D-WV) proposed using tax incentives to spur broadband deployment. A very similar, but not identical approach can be found in H.R. 691, “Broadband Access Equality Act of 2009.”<sup>8</sup>

While the Commission does not have jurisdiction over the tax code to implement such actions, TechAmerica encourages the Commission to call on Congress to pass broadband tax incentives as a part of its national broadband plan.

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<sup>6</sup> See *NOI*, para. 37-38 (inquiring about the costs of broadband deployment). See also Comments of Communications Workers of America, GN Docket No. 09-51, at 17-18 (filed June 8, 2009) (“Building and upgrading universal, advanced networks will require tens of billions of dollars. Private capital will largely pay for this, with public support at the margins. The most cost-effective policy to encourage and accelerate the deployment of those networks is a program of targeted, temporary tax incentives that lower the cost of capital for these investments.”). TechAmerica supports the position of the Communications Workers of America on engaging in a tax incentive program to encourage and accelerate the deployment of broadband.

<sup>7</sup> See, e.g., ROBERT ATKINSON, DANIEL CORREA, & JULIE HEDLUND, INFO. TECH. & INNOVATION FOUND., EXPLAINING INTERNATIONAL BROADBAND LEADERSHIP 24-26 (May 2008), <http://www.itif.org/files/ExplainingBBLeadership.pdf>.

<sup>8</sup> See Broadband Access Equality Act of 2009, H.R. 691, 111th Cong. (1st Sess. 2009) (attached as Exhibit A).

**B. Broadband deployment will be more cost-effective if the Commission ensures that current and future transportation infrastructure projects are tied to deployment of broadband infrastructure.**

As the Commission looks at innovative ways to lower the costs of broadband deployment, we encourage the FCC to tie broadband deployment to transportation infrastructure projects that are planned in the future or already under development.<sup>9</sup> One of the costs of broadband deployment, especially for fixed broadband, is digging up our roads to deploy fiber and other technologies to deliver broadband. As an example, The Federal Highway Administration (FHA) estimates that 90 percent of the cost of deploying fiber along roadways is from digging up and repairing the road to install the buried fiber.<sup>10</sup>

Currently, there is legislation in the House and Senate that would create cost savings for broadband deployment by directing the Secretary of Transportation to require states to install fiber optic cables or wireless facilities that support broadband service in certain highway construction projects. The Commission should include this legislation, H.R. 2428 in the House and S. 1266 in the Senate, “The Broadband Conduit Deployment Act of 2009” in its national broadband plan.<sup>11</sup>

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<sup>9</sup> See, e.g., Comments of Google, GN Docket No. 09-51, at 36.

<sup>10</sup> See U.S. DEP’T OF TRANSP., FED. HIGHWAY ADMIN., TELECOMMUNICATIONS HANDBOOK FOR TRANSPORTATION PROFESSIONALS 41 (Sep 2004), [http://ops.fhwa.dot.gov/publications/telecomm\\_handbook/telecomm\\_handbook.pdf](http://ops.fhwa.dot.gov/publications/telecomm_handbook/telecomm_handbook.pdf).

<sup>11</sup> See Broadband Conduit Deployment Act of 2009, S. 1266, 111th Cong. (1st Sess. 2009) (attached as Exhibit B).

### **C. Spectrum Policy can play an important role in broadband deployment**

Understanding and utilizing our limited spectrum can play an important role in a national broadband plan.<sup>12</sup> There have been calls for taking a spectrum inventory.<sup>13</sup> Congress is also looking to move legislation that would call for the National Telecom and Information Administration (“NTIA”) to take an inventory of our spectrum.<sup>14</sup> Because of limited spectrum, this makes sense. However, TechAmerica has concerns about how this would be done.

We need to make sure we are looking at all commercial spectrum by taking an inventory on a market-by-market basis of available spectrum suitable for broadband. Especially in rural areas, where spectrum is often underutilized, this inventory could provide insight into what band might be available in a community for wireless and mobile broadband.

However, it is also important that this inquiry is limited to our commercial spectrum. There is a lot of spectrum allocated for government use which should not be looked at as a part of this inventory. The government has contracts with the private sector which have led to billions of dollars of investment in the development and implementation of technology and products that utilize this spectrum. It would be unfair and unwise for the private sector companies, who have invested billions at the request of the federal government, to incur substantial losses before doing an exhaustive review of

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<sup>12</sup> See *NOI*, para. 44 (asking for comment on spectrum policy).

<sup>13</sup> See Comments of The New America Foundation, GN Docket No. 09-51, at 16-23 (filed June 8, 2009); Joint Comments of Public Knowledge, Media Access Project, The New America Foundation, and U.S. PIRG, GN Docket No. 09-51, at 29-33 (filed June 8, 2009).

<sup>14</sup> See Radio Spectrum Inventory Act of 2009, S. 649, 111th Cong. (1st Sess. 2009); Radio Spectrum Inventory Act of 2009, H.R. 3125, 111th Cong. (1st Sess. 2009).

the commercial spectrum first. Additionally, there are national security elements for some of this spectrum that need to be taken into account. These national security issues go beyond the considerations of this NOI. If such an inventory occurred, it would warrant an appropriate vetting and discussion with our national security apparatus, including the Department of Defense and Intelligence agencies.

### **III. AFFORDABILITY AND MAXIMUM UTILIZATION**

#### **A. Programs that focus on increasing demand will play a key role in any broadband deployment plan.**

While much of the debate around broadband has focused on deployment and the supply side of the equation, programs that focus on maximum utilization of broadband – the demand side of the equation – are an important part of a national broadband plan. TechAmerica specifically refers to the excellent comments of Connected Nation on the state of the market, for why the demand issue is so important, as well as some of the key programs for stimulating demand.<sup>15</sup> Rather than restate what Connected Nation has filed on pages 15-30 of its filing, which TechAmerica enthusiastically endorses, we will just highlight some key points in their filing. In particular, TechAmerica supports comments that have called for demand stimulation programs that focus on (1) increasing computer ownership; and (2) improved digital literacy.

Programs that focus on computer ownership, especially in households with school age children, will create multiple benefits for society only one of which is higher uptake of broadband services. Exposing more children to computers at an earlier stage will be a

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<sup>15</sup> See Comments of Connected Nation, GN Docket No. 09-51, at 15-30 (filed June 6, 2009).

sound investment for the future of the American economy, and enhance national competitiveness. Any national broadband plan should therefore create funding mechanisms and incentives to ensure that every K-12 student in America has a computer hooked up to a high capacity broadband connection in their home.

Second, broadband has failed to penetrate in some communities where digital literacy is below average. Some examples of groups and communities with much lower rates of broadband uptake include low-income communities, seniors, and the disabled. Programs that focus on educating these communities about how broadband and computers work, how they can benefit from them, and the value they will add to their lives will stimulate broadband uptake in these communities, along with all of the societal benefits of broadband usage in a community.

#### **IV. STATUS OF DEPLOYMENT**

##### **A. Mapping will play a key role in assessing the current state of broadband deployment and help in measuring success of the national broadband plan.**

Broadband maps are essential to guide the Commission's efforts to deploy broadband to unserved and underserved communities and to evaluate the progress of the national broadband plan. An accurate map will provide the Commission with a good picture of where broadband deployment efforts need to be targeted. The Broadband Data Improvement Act of 2008 (BDIA)<sup>16</sup> along with its funding by ARRA has set the framework for mapping. Our member companies are in the process of reviewing NTIA's

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<sup>16</sup> See Broadband Data Improvement Act of 2008, Pub. L. No. 110-385, 122 Stat. 4096.

implementation of BDIA and will update these reply comments, if necessary, on NTIA's implementations.

**B. The ARRA Grant and Loan programs are a good start in achieving our national broadband goals, and can provide guidance on what does and does not work.**

ARRA's Grant and Loan programs play an important role – they are both the first step in a national broadband plan, as well as a test on what does and does not work in deploying broadband. The Commission should closely follow the results of the deployment that occurs from both the loan and grant programs at the Department of Agriculture Rural Utilities Service (RUS) and NTIA, and ensure that it learns from the success and failures of the programs in creation of this plan.

Additionally, there are limitations to ARRA's programs that need to be taken into account. While TechAmerica supports ARRA's programs for broadband deployment, more funding will be needed to ensure we achieve the goal of every American having access to a high capacity broadband connection. The Commission would be best served by viewing ARRA's programs as a small part in the broader effort to maximize broadband deployment and adoption. The Commission must seek to supplement and augment the efforts at RUS and NTIA under ARRA to reach that goal of 100% access.

**V. SPECIFIC POLICY GOALS OF THE NATIONAL BROADBAND PLAN**

**A. The Commission is not the proper forum to formulate cybersecurity policy.**

While cybersecurity plays a role in broadband deployment, there are concerns far beyond broadband deployment when it comes to cybersecurity, and the Commission

should avoid working on these concerns in this proceeding. Instead, the Commission should note their importance and defer to the soon to be appointed White House coordinator on Cybersecurity and the agencies of jurisdiction over cybersecurity to ensure proper implementation of our national cybersecurity policy. In doing so, the Commission will best serve its goal in this proceeding of ensuring proper implementation of a national broadband plan.

**B. E-government initiatives play an important role driving consumer demand for broadband and increasing awareness of government activities by citizens as well as helping to make citizen's voices heard.**

Increased government services online help drive demand for broadband, similar to those discussed in Section III-A above.<sup>17</sup> For example, consumers today can use the internet to pay taxes, renew a driver's license or pay a speeding ticket. All of these efficiencies create better citizen-government interaction and create incentives for broadband adoption across the U.S. As part of its national broadband plan, the Commission should ask that the Federal government lead the way in putting as many services online as possible in order to stimulate demand for Internet services as well as providing better service to citizens.

Additionally, new media or so-called Web 2.0 applications have created an exciting new ability for citizens to interact with their government in ways that were impossible just a decade ago. The Obama Administration's use of these technologies for two-way communications between the government and citizens has been impressive to watch. However, a large part of America is being left out of that participation because

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<sup>17</sup> See discussion *infra* Part III.A, p. 8.

they do not have access to broadband. It is important, that as our government creates these new Web 2.0 communities and portals for communication and access to government data, that they work tirelessly to ensure that all Americans have access to those services.

**C. The Commission should note that Health IT will be another important driver in use of broadband services and defer to HHS and other relevant expert agencies to implement a national Health IT and Telehealth policy.**

There is no doubt that Health IT and Telehealth play an instrumental role in driving demand for broadband services, and have been a key part of the drive behind the push for broadband deployment.<sup>18</sup> Additionally, hospitals and community health centers can be an anchor institution in a community as discussed in Section I-B above.<sup>19</sup> However, when it comes to the details of Health IT and Telehealth policy, the Commission should defer to the expert agencies in provision of health care services, as there are concerns far beyond broadband deployment when it comes to Health IT and Telehealth. In this way, the Commission will ensure deployment of Health IT and Telehealth services in a manner that will best service broadband deployment.

**D. Broadband infrastructure can enhance energy independence in many ways.**

Broadband deployment can enhance our efforts at energy independence by (1) reducing energy costs through the use of smart grid technology; (2) increasing energy efficiency by enabling interactive home and business wireless applications; (3)

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<sup>18</sup> See NOI, para. 81-85 (asking for comment on the role of Health IT and Telehealth play in driving broadband deployment).

<sup>19</sup> See discussion *supra* Part I.B, p. 4.



maximizing energy efficiency through remote shared hosting servers; and (4) reducing the demand for personal transportation by encouraging telework.<sup>20</sup>

1. Smart grid technology brings broadband intelligence to the electric grid and enables energy savings.

Smart grid technology will bring broadband and intelligence to the electric grid, enabling large energy savings. The smart grid integrates our broadband infrastructure into our electrical grid, allowing for better control over energy usage by our electrical networks.<sup>21</sup> It is important, that as the Commission looks into broadband deployment, it take into account the benefits that will be gained from the smart grid in designing its plan. The Commission needs to coordinate its Broadband deployment plan with the Departments of Energy and Commerce, and their efforts around the smart grid, to ensure proper integration of smart grid technologies with our national broadband plan. This includes making sure that smart grid technologies get proper consideration for use of spectrum.<sup>22</sup>

2. Broadband enables an interactive home/business that allows for smart devices to become more energy efficient and for better user control of appliance energy usage.

Broadband technologies will play another role in energy efficiency by enabling an interactive home and business environment that allows smart devices to become more energy efficient. Local wireless networks in the home will allow appliances in the home to talk to each other, which creates large potential energy savings. Additionally, mobile

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<sup>20</sup> See NOI, para. 86-87 (asking for comment about the role of broadband in enhancing America's energy independence).

<sup>21</sup> See, e.g., Joint Comments of the National Rural Electric Cooperative Association & Digitalbridge Communications Corp., GN Docket No. 09-51, at 14-15 (filed June 8, 2009); Comments of Utilities Telecom Council and Edison Electric Institute, GN Docket No. 09-51, at 3-6 (filed June 8, 2009).

<sup>22</sup> See, e.g., Comments of Motorola, GN Docket No. 09-51, at 35-36 (filed June 8, 2009).

broadband will allow consumers to control their energy costs in the home, by, for example, enabling them to turn on the air conditioning 30 minutes before they get home rather than leaving it on all day. On an individual scale, these changes seem miniscule, but when the aggregate impact of nationwide implementation is taken into account, they can go a long way towards achieving energy independence.

3. Cloud Computing and shared remote hosting allows for economies of scale to be applied to ICT energy usage.

Another benefit to widespread broadband deployment to our goal of energy independence is the economies of scale that will come from cloud computing and shared remote hosting. The ICT is a large user of energy resources. However, servers rarely are operating at capacity, wasting energy usage. Widespread broadband deployment will help move much of our data onto a shared remote hosting model, which will allow for much more efficient use of energy as it relates to ICT. Without broadband, this cannot happen, as it will require a high capacity network to allow for this model to proliferate.

4. Telework promotes energy efficiency.

Telework has huge potential for energy savings, as every time an employee works from home they are not driving to work.<sup>23</sup> One day of telecommuting saves 1.4 gallons of gasoline and reduces CO2 emissions by 17 to 23 kilograms per day.<sup>24</sup> Without broadband deployment, the energy benefits of telework will not be maximized. Four

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<sup>23</sup> See *NOI*, para. 87 (inquiring about the role telework and telecommuting can play in our Nation's energy efficiency).

<sup>24</sup> TIAX LLC, THE ENERGY AND GREENHOUSE GAS EMISSIONS IMPACT OF TELECOMMUTING AND E-COMMERCE 7 (July 2007), [http://www.ce.org/Energy\\_and\\_Greenhouse\\_Gas\\_Emissions\\_Impact\\_CEA\\_July\\_2007.pdf](http://www.ce.org/Energy_and_Greenhouse_Gas_Emissions_Impact_CEA_July_2007.pdf).

million telecommuters is the equivalent of removing 2 million cars from the road.<sup>25</sup>

Broadband in every home will increase the ability to telecommute, thus creating huge energy consumption savings for Americans.

**E. Research and Development plays an important role in creation of next generation broadband technologies.**

Direct funding for research and development and making the Research and Development Tax Credit (“R&D Tax Credit”) permanent will play an important role in the plan, as they will be a key part of developing the next and best broadband technologies.<sup>26</sup> For years, America has had a system where we encourage research and development through a combination of government funding and the R&D Tax Credit. Government funding of the sciences and technology was recently doubled over the next ten years in President Obama’s budget, and TechAmerica is supportive of that increase. Additionally, ARRA had a commitment to a need for additional funding for science and technology as a part of our economic recovery. The national broadband plan should highlight the importance of this funding and encourage continued funding into new technologies that will create the next and best broadband networks.

The R&D tax credit is an important incentive that leads to increased investment in research and development of new broadband technologies that should deliver faster speeds and create more efficient use of network capacity. The tax credit creates a market incentive for our innovators to innovate, and broadband is just one of the multitude of examples that has benefited from the R&D tax credit.

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<sup>25</sup> *Id.* at 7-8.

<sup>26</sup> *See NOI*, para. 97 (inquiring about the role of research and development).

However, the benefit to broadband has not been maximized because we have failed to make the R&D tax credit permanent. Despite numerous and repeated extensions of the credit, the failure to make the tax credit permanent has made it harder for private sector companies, especially small businesses, to invest in long term research and development projects that often take as long as 10-20 years. The risk of Congress failing to reauthorize the tax credit causes companies to invest less or choose not to invest in projects that could produce the next great broadband development. TechAmerica encourages the Commission to advise Congress that a permanent R&D tax credit is integral to its national broadband plan.

## **VI. OTHER MATTERS RAISED IN COMMENTS**

### **A. The Commission should not involve itself on the issue of use of network management to filter for copyright infringing material as part of this plan.**

Many commenters are trying to jump on the network management elements of the NOI to set up a regime for the filtering of networks for copyright infringing material.<sup>27</sup> TechAmerica is a strong supporter of intellectual property protections, and the key role they play in our innovation economy. Copyright infringement online is an issue for many of our companies. However, the national broadband plan is not the right place to tackle a complicated intellectual property issue that has implications far beyond our broadband policy.

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<sup>27</sup> See, e.g., Comments of Walt Disney Company, GN Docket No. 09-51, at 1 (filed June 8, 2009); Comments of Songwriters Guild of America (“SGA”), GN Docket No. 09-51, at 3 (filed June 8, 2009); Comments of Entertainment Software Association (“ESA”), GN Docket No. 09-51, at 4 (filed June 8, 2009).

It is important to note here that TechAmerica's members are divided on the issue of the role of network management and network neutrality in a national broadband plan and have thus refrained from commenting on such. Despite this divide, there is consensus amongst TechAmerica's members that it is improper for the Commission to wade into an intellectual property debate on the role network intermediaries play in policing networks for copyright infringing material.<sup>28</sup> It is unnecessary for the Commission to address network management/network neutrality and its effect on copyright infringement because they have no relation to broadband deployment. Instead of addressing them in the development of a national broadband plan, these issues should be left to Congress as part of a broader discussion of copyright law and the Internet.

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<sup>28</sup> See Comments of SGA, GN Docket No. 09-51, at 3; Comments of ESA, GN Docket No. 09-51, at 4.

## **EXHIBIT A**

### **Broadband Access Equality Act of 2009 (Introduced in House)**

111th CONGRESS  
1st Session  
**H.R. 691**

To amend the Internal Revenue Code of 1986 to provide a credit against income tax for businesses furnishing broadband services to underserved and rural areas.

### **IN THE HOUSE OF REPRESENTATIVES**

**January 26, 2009**

Mr. MEEK of Florida introduced the following bill; which was referred to the Committee on Ways and Means

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### **A BILL**

To amend the Internal Revenue Code of 1986 to provide a credit against income tax for businesses furnishing broadband services to underserved and rural areas.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### **SECTION 1. SHORT TITLE.**

This Act may be cited as the 'Broadband Access Equality Act of 2009'.

#### **SEC. 2. CREDIT FOR PROPERTY USED TO FURNISH BROADBAND SERVICES IN UNDERSERVED AND RURAL AREAS.**

(a) In General- Subpart D of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 (relating to business related credits) is amended by inserting after section 45Q the following new section:

#### **`SEC. 45R. PROPERTY USED TO FURNISH BROADBAND SERVICES IN UNDERSERVED AND RURAL AREAS.**

`(a) In General- For purposes of section 38, the broadband services credit determined under this section is an amount equal to the applicable percentage of

the cost of each qualified broadband property placed in service during the taxable year.

`(b) Applicable Percentage-

`(1) IN GENERAL- For purposes of subsection (a), the applicable percentage is--

`(A) 50 percent for qualified broadband property for underserved and rural areas in which, on the date of the enactment of this section, not more than the greater of--

`(i) 5 percent of the households, or

`(ii) 20 households,

have broadband access, and

`(B) 30 percent for qualified broadband property for underserved and rural areas which, on such date, are not described in paragraph (1).

`(2) INCREASED PERCENTAGE WHERE HIGH SPEED SERVICE PROVIDED- The applicable percentage determined under paragraph (1) shall be increased by 10 percentage points for qualified broadband property providing transmission service at a speed which is not less than--

`(A) except in the case of commercial mobile radio services, 50 megabits per second downstream and 20 megabits per second upstream, and

`(B) in the case of commercial mobile radio services, 10 megabits per second downstream and 2 megabits per second upstream.

`(c) Definitions- For purposes of this section--

`(1) QUALIFIED BROADBAND PROPERTY- The term 'qualified broadband property' means section 1245 property (as defined in section 1245(a)(3))--

`(A) which is used to provide broadband services in underserved or rural areas to purchasers of such services,

`(B) which is--

`(i) tangible property (to which section 168 applies), or

`(ii) computer software (as defined in section 197(e)(3)(B)) which is described in section 197(e)(3)(A) and to which section 167 applies, and

`(C) the original use of which commences with the taxpayer.

Such term shall not include any property described in section 50(b).

`(2) BROADBAND- The term 'broadband' means an Internet Protocol-based transmission service (at a speed which is not less than 5 megabits per second downstream and 1 megabit per second upstream) that enables users to send and receive voice, video, data, graphics, or a combination, without regard to any transmission media or technology.

`(3) UNDERSERVED AREA- The term 'underserved area' means--

`(A) any census tract that is located in--

- `(i) an empowerment zone or enterprise community designated under section 1391, or
- `(ii) the District of Columbia Enterprise Zone established under section 1400, or

`(B) any census tract--

- `(i) the poverty level of which is at least 30 percent (based on the most recent census data), and
- `(ii) the median family income of which does not exceed--
  - `(I) in the case of a census tract located in a metropolitan statistical area, 70 percent of the greater of the metropolitan area median family income or the statewide median family income, and
  - `(II) in the case of a census tract located in a nonmetropolitan statistical area, 70 percent of the nonmetropolitan statewide median family income.

`(4) RURAL AREA- The term 'rural area' means any census tract outside a metropolitan statistical area (as defined by the Office of Management and Budget).

`(5) REGULATED ENTITIES- The credit determined under subsection (a) may not be used to reduce a taxpayer's cost of service, but may be used to reduce rate base, provided that such reduction is restored not less rapidly than ratably. For purposes of determining ratable restorations to rate base, the period of time used in computing depreciation expense for purposes of reflecting operating results in the taxpayer's regulated books of account shall be used.

`(d) Recapture in Case of Dispositions, etc- Under regulations prescribed by the Secretary--

`(1) EARLY DISPOSITION- If, before the close of the period to which section 50(a)(1) applies, qualified broadband property is disposed of or ceases to be used to provide broadband services to any underserved area, then the tax under this chapter for the taxable year in which such disposition or cessation occurs shall be increased by the recapture percentage (determined under the table contained in section 50(a)(1)(B)) of the aggregate credits allowed under subsection (a) for all prior taxable years.

`(2) SUBSECTION NOT TO APPLY IN CERTAIN CASES- Rules similar to the rules of section 50(a)(4) shall apply for purposes of paragraph (1).

`(e) Other Rules To Apply- Rules similar to the rules of paragraphs (3), (4), and (5) of section 179(d) shall apply for purposes of this section.

`(f) Basis Reduction- Rules similar to the rules of sections 50(c) (other than paragraph (3)) and 1016(a)(19) shall apply for purposes of this section.'

(b) Credit To Be Part of General Business Credit- Subsection (b) of section 38 of such Code is amended by striking 'plus' at the end of paragraph (34), by striking



the period at the end of paragraph (35) and inserting `, plus', and by adding at the end the following new paragraph:

`(36) the broadband services credit determined under section 45R(a).'

(c) Clerical Amendment- The table of sections subpart D of part IV of subchapter A of chapter 1 of such Code is amended by adding at the end the following new item:

`Sec. 45R. Property used to furnish broadband services in underserved and rural areas.'

(d) Effective Date- The amendments made by this section shall apply to property placed in service after the date of enactment of this Act in taxable years ending after such date.

## **EXHIBIT B**

### **Broadband Conduit Deployment Act of 2009 (Introduced in Senate)**

111th CONGRESS  
1st Session  
**S. 1266**

To amend title 23, United States Code, to direct the Secretary of Transportation to require that broadband conduit be installed as part of certain highway construction projects, and for other purposes.

#### **IN THE SENATE OF THE UNITED STATES**

**June 15, 2009**

Ms. KLOBUCHAR (for herself, Mr. WARNER, and Mrs. LINCOLN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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#### **A BILL**

To amend title 23, United States Code, to direct the Secretary of Transportation to require that broadband conduit be installed as part of certain highway construction projects, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### **SECTION 1. SHORT TITLE.**

This Act may be cited as the 'Broadband Conduit Deployment Act of 2009'.

#### **SEC. 2. INCLUSION OF BROADBAND CONDUIT INSTALLATION IN CERTAIN HIGHWAY CONSTRUCTION PROJECTS.**

Chapter 3 of title 23, United States Code, is amended by adding at the end the following:

**`Sec. 330. Inclusion of broadband conduit installation in certain highway construction projects**

`(a) In General- The Secretary shall require States to install broadband conduit in accordance with this section as part of any covered highway construction project.

`(b) Installation Requirements- In carrying out subsection (a), the Secretary shall ensure with respect to a covered highway construction project that--

`(1) an appropriate number of broadband conduits, as determined by the Secretary, are installed along such highway to accommodate multiple broadband providers, with consideration given to the availability of existing conduits;

`(2) the size of each such conduit is consistent with industry best practices and is sufficient to accommodate potential demand, as determined by the Secretary; and

`(3) hand holes and manholes for fiber access and pulling with respect to each such conduit are placed at intervals consistent with industry best practices, as determined by the Secretary.

`(c) Standards- The Secretary shall establish standards to carry out subsection (b) that consider population density in the area of a covered highway construction project, the type of highway involved in such project, and existing broadband access in the area of such project.

`(d) Pull Tape- The Secretary shall ensure that each broadband conduit installed pursuant to this section includes a pull tape and is capable of supporting fiber optic cable placement techniques consistent with industry best practices, as determined by the Secretary.

`(e) Depth of Installation- The Secretary shall ensure that each broadband conduit installed pursuant to this section is placed at a depth consistent with industry best practices, as determined by the Secretary, and that, in determining the depth of placement, consideration is given to the location of existing utilities and the cable separation requirements of State and local electrical codes.

`(f) Definitions- In this section, the following definitions apply:

`(1) BROADBAND- The term 'broadband' means an Internet Protocol-based transmission service that enables users to send and receive voice, video, data, graphics, or a combination thereof.

`(2) BROADBAND CONDUIT- The term 'broadband conduit' means a conduit for fiber optic cables that support broadband or, where appropriate, wireless facilities for broadband service.

`(3) COVERED HIGHWAY CONSTRUCTION PROJECT- The term 'covered highway construction project' means a project to construct a new highway or to construct an additional lane or shoulder for an existing highway that is commenced after the date of enactment of this section and that receives funding under this title.

`(g) Waiver Authority- The Secretary may waive the application of this section or any provision therein if the Secretary determines such waiver appropriate with respect to a covered highway construction project.

`(h) Coordination With FCC- In carrying out this section, the Secretary shall coordinate with the Federal Communications Commission as the Secretary determines appropriate, including in making determinations with respect to potential demand under subsection (b)(2) and existing broadband access under subsection (c).'

### **SEC. 3. CLERICAL AMENDMENT.**

The analysis for chapter 3 of title 23, United States Code, is amended by adding at the end the following:

`330. Inclusion of broadband conduit installation in certain highway construction projects.'